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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,722	02/14/2002	Luke David Jagger	NETAP022	1628

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EXAMINER

BLACKWELL, JAMES H

ART UNIT PAPER NUMBER

2176

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/075,722

Applicant(s)

JAGGER ET AL.

Examiner

James H. Blackwell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This Office Action is in response to Amendment received 02/18/2005.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 16, 21, and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, page 11 of the specification discusses that checksums are generated after non-static material is removed (lines 1-3). However, in the second paragraph (line 14) it states that since much of the non-static data in an Internet mail message resides at the top of the e-mail, that the system 40 preferably works backwards through the body of the e-mail message from the last line of the body text (i.e., from top to bottom) (page 11, lines 14-21). This notion of working from bottom to top is the subject of Claims 4, 16, 21, and 23. The motivation implied in lines 14-16 and in the claim language of Claims 4, 16, 21, and 23 is confusing and contradictory when compared to lines 1-3 of page 11 which implies that non-static information is removed prior to the generation and subsequent scanning of checksums and that it would be faster due to header information to scan from bottom to top when in fact no header information exists. Therefore the claims are indefinite.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, and 8-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Townshend (U.S. Patent No. 6,829,635) in view of Ralston et al. (hereinafter Ralston, U.S. Patent No. 6,842,773).

In regard to independent Claim 1 (and similarly independent claims 13, and 18), Townshend teaches *receiving an electronic mail message* in that bulk email messages are identified. In Fig. 3, step 302 an email message is received by a server.

Townshend does not explicitly teach *removing non-static data from the electronic mail message*. However, Ralston teaches a process for generating a signature (checksum) of an email based on the body of the message. The process begins in step 704 where an e-mail message 400 is retrieved. Information such as *headers* or hidden information (e.g., *end-of-line characters*) in the body (408) of the message (400) is *removed to leave behind the visible body (408) of the message (400) in step 708*. Hidden information is anything that is not visible the user when reading the message such as white text on a white background or other HTML information. Such hidden information could potentially confuse processing of the message (400) (Col. 14, lines

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10-20). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Townshend and Ralston as both inventions relate to ways of detecting and blocking bulk email. Adding the teaching of Ralston provides the benefit of removing potentially confusing components from email making it easier to compare emails.

Townshend continues by teaching *generating a checksum based on data remaining within the electronic mail message* by applying one-way hash functions, which generate numeric values unique to the selected portion of the email message encoded (Col. 3, lines 45-67).

Townshend also teaches *comparing the generated checksum with a database containing checksums for previously identified unsolicited messages* in that a central server (140) receives signatures from a plurality of electronic mail servers, and stores data about the received signatures in received signature store (146) (*a database*). The received signature store is a data structure containing records for signature elements of message signatures received by a central server. The central server uses data in received signature store to determine a count of matching signature elements to return to the electronic mail server (Col. 5, lines 25-32).

Townshend also teaches *identifying the electronic message as an unsolicited message if the generated checksum matches one of the database checksums* in that when the central server receives a message signature, the central server generates a count of how many times a matching signature element in the message signature has been previously received. The central server transmits the count of the most frequently

matched signature element to the electronic mail server that transmitted the just received message signature. If the count meets a predetermined threshold, the electronic mail server marks the electronic mail message as bulk electronic mail (Col. 3, lines 59-67).

In regard to dependent Claim 2 (and similarly dependent Claims 3, 14-15, and 20), Townshend teaches that a signature element may be generated from a single paragraph (*usually lines of data*), from a single paragraph of a given size, from a set of words in an electronic mail message that are in a dictionary, or from words appearing a given number times, or from all of an electronic mail message but the first and last n lines (Col. 6, lines 59-65).

Townshend also suggests *generating a checksum comprises generating individual checksums for portions of the remaining data* in that multiple elements may be generated and that the signature can be multiple components, or a single number (Col. 7, lines 18-30).

In regard to dependent Claim 4 (and similarly dependent Claims 16, 21, and 23), Townshend fails to teach *comparing a checksum comprises comparing checksums starting with one of the portions at the end of the remaining data and working backwards through the data*. However, it is notoriously well known in the art to make comparisons between items in any order. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to compare checksums in either

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direction (top to bottom, or bottom to top) providing the benefit of identifying unsolicited emails.

In regard to dependent Claim 5, Townshend does not explicitly teach *removing non-static material comprises removing forwarding information*. However, Ralston teaches a process for generating a signature of an email based on the body of the message. The process begins in step (704) where an e-mail message (400) is retrieved. Information such as headers or hidden information in the body (408) of the message (400) *is removed to leave behind the visible body (408) of the message (400) in step 708*. Hidden information is anything that is not visible the user when reading the message such as white text on a white background or other HTML information. Such hidden information could potentially confuse processing of the message (400) (Col. 14, lines 10-20). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Townshend and Ralston as both inventions relate to ways of detecting and blocking bulk email. Adding the teaching of Ralston provides the benefit of removing potentially confusing components from email making it easier to compare emails.

In regard to dependent Claim 8, Townshend teaches *deleting the electronic mail message if the message is identified as an unsolicited message* in that electronic mail messages that are found to be bulk electronic mail messages may be flagged or deleted (Col. 3, lines 36-37).

In regard to dependent Claim 9, Townshend teaches *at least temporarily storing the electronic message if the message is identified as an unsolicited message* in that after the steps are performed, the electronic mail message (210) may be transmitted to one or more other electronic mail servers, or transmitted to one or more electronic mail clients. These recipients of the electronic mail message may then determine whether or not the electronic mail message will be further received or further processed (Col. 9, lines 1-6).

In regard to dependent Claim 10, Townshend teaches *forwarding the electronic message to an intended recipient if the message is not identified as an unsolicited message* in that after the steps are performed, the electronic mail message (210) may be transmitted to one or more other electronic mail servers, or transmitted to one or more electronic mail clients. These recipients of the electronic mail message may then determine whether or not the electronic mail message will be further received or further processed (Col. 9, lines 1-6). From this, one could conclude that if the email is not flagged as being unsolicited (or bulk) it will be sent in the normal fashion to another server or to a client.

In regard to dependent Claim 11, Townshend teaches *updating the database with new checksums* in that at step 376, the received signature store is updated. If a record was found in step 370, the found record is updated with the incremented count. If

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the age is nonzero, it is set to zero. If a record was not found at step 370, then a new record is created with a count of one and an age of zero. Control then flows to step 368 (Col. 8, lines 22-27).

In regard to dependent Claim 12, Townshend teaches *the database is updated based on checksums generated from electronic messages received and identified as an unsolicited message* in that at step 376, the received signature store is updated. If a record was found in step 370, the found record is updated with the incremented count. If the age is nonzero, it is set to zero. If a record was not found at step 370, then a new record is created with a count of one and an age of zero. Control then flows to step 368 (Col. 8, lines 22-27).

In regard to dependent Claim 17, Townshend teaches that *the database is configured to receive updates* in that at step 376; the received signature store is updated. If a record was found in step 370, the found record is updated with the incremented count. If the age is nonzero, it is set to zero. If a record was not found at step 370, then a new record is created with a count of one and an age of zero. Control then flows to step 368 (Col. 8, lines 22-27).

In regard to dependent Claim 19, Townshend teaches *the computer readable medium is selected from the group consisting of CD-ROM, floppy disk, tape, flash memory, system memory, and hard drive* in that various forms of computer readable

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media may be involved in carrying one or more sequences of one or more instructions to processor (604) for execution. For example, the instructions may initially be carried on a magnetic disk of a remote computer (Col. 14, lines 3-7).

In regard to dependent Claim 22, Townshend does not explicitly teach that *the forwarding information includes a ">" character*. However, it is notoriously well known to one of ordinary skill in the art of electronic mail to know that forwarded information is commonly designated by prefixing each line with a right caret (">") character.

In regard to dependent Claims 24-25, Claims 24-25 reflect the method for identifying unsolicited electronic mail messages in a computer as claimed in Claim 1 (and similarly Claims 13, and 18) and are rejected along the same rationale.

Response to Arguments

Applicant's arguments with respect to claims 1-5, and 8-25 have been considered, but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James H. Blackwell whose telephone number is 571-272-4089. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James H. Blackwell
05/27/05

William L. Bashore
WILLIAM BASHORE
PRIMARY EXAMINER
May 31, 2005